



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

HC

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/796,752	02/06/97	ARAI	K 614.1804/HJS

LM02/0531

STAAS & HALSEY
700 ELEVENTH STREET N W
SUITE 500
WASHINGTON DC 20001

EXAMINER

NGUYEN, P

ART UNIT	PAPER NUMBER
2739	9

DATE MAILED: 05/31/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/796,752

Applicant(s)
Koji Aral

Examiner
Phuongchau Ba Nguyen

Group Art Unit
2739



☒ Responsive to communication(s) filed on Mar 24, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1835 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-9, 11, 12, and 14-17 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1, 2, 6, 7, and 14-17 is/are rejected.

☒ Claim(s) 3-5, 8, 9, 11, and 12 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☒ The proposed drawing correction, filed on Mar 24, 2000 is ☒ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

FINAL ACTION

1. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “down converting distributed signals” must be shown or the feature(s) canceled from the claim(s)[i.e., claims 1-2, 6-7, 16-17]. No new matter should be entered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 2, 6, 7, 16, 17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter such as “down converting distributing signals” (lines 2 & 14 on page 2; lines 3 & 15 on page 5; lines 7 & 13 on page 7, Remarks) which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-2, 6-7, 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims are not clear how can a input signal is splitting to plurality signals if that input signal is not a TDM signal? Also, claims are not clear how the distributed signals being down converted if that distributed signals are not RF signals? Please clarify and reference this limitations to the specification so metes and bound of the claims can be determined from the claim language.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 6-7, 14-16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pirinen (5,648,962) in view of the admitted prior art.

In U.S. patent No. 5,648,962 Pirinen discloses a time slot switch 105 which receives and distributes a high rate TDM signal (2Mbps), converts the high rate TDM signal into a plurality of low rate signals, and transmits the low rate signals from the -transceivers in the form of RF signals (third signals). See Fig. 1, 2 and col. 3, line 65, to col. 4, line 43.

Pirinen does not show transmitting the low rate signals to a terminal unit.

As shown in Fig. 1 and described at pages 1-2 of the specification, the admitted prior art shows a hub and transmitting signals from a plurality of base stations to a terminal unit. To use the switch 105 of Pirinen for connecting the hub and the base stations of the admitted prior art would have been obvious to one of ordinary skill in the art because Pirinen explicitly suggests that the use of the switch 105 provides flexible allocation and release of radio channels (col. 1, lines 60-63).

As to claims 2, 7, 16-17, in the Pirinen system, the transceivers 107 108 receive low rate signals, and the multiplexer/demultiplexer 104 converts the low/high rate signals to a high/low rate signals. To use the multiplexer/demultiplexer and transceivers of Pirinen in the terminal station of the admitted prior art would have been obvious to one skilled in the art, and the motivation/suggestion for doing so would have been to obtain duplex transmission between the terminal unit and the base stations, as is common practice in the art.

Allowable Subject Matter

3. Claims 3-5, 8-9, 11-12 are allowable over prior art of the record.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is (703) 305-0093.

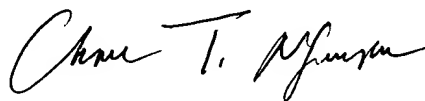
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen, can be reached on (703) 308-5340. The fax number for this group is (703)305-9509.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-3900.

PN

P. NGUYEN

May 25, 2000



CHAU NGUYEN
PRIMARY EXAMINER